but venous thromboembolic disease, lymphatic disease, hypertension and lipid disorders. It is clear that many of these diseases take a back seat or a secondary role with the cardiologist and other subspecialists. The vascular medicine specialist puts these all together under one roof.

We agree that it is essential for the American Board of Internal Medicine to recognize the importance of vascular disease and to consider it in their board certification process. At the very least, special qualifications in vascular medicine should be issued by the American College of Cardiology. We are fully in support of the American College of Cardiology's desire to develop this subspecialty further. In addition, we believe, with Cooke and Dzau (2), that "the time has come for vascular medicine."

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Reply

I appreciate the comments from those in the Department of Vascular Medicine at the Cleveland Clinic regarding my President's Page. I am asking Jack Spittell, MD, who chairs the ACC Peripheral Vascular Disease Committee to make recommendations for a specific proposal that might be presented to the American Board of Internal Medicine to recognize the special qualifications of those with specific training in vascular medicine.

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Balloon Valvuloplasty as Palliation in Tetralogy

In July 1991, Sreeram and colleagues (1) from Liverpool reported their results with balloon valvuloplasty as initial palliation in patients with tetralogy of Fallot. Approximately one-half their patients exhibited an improvement in oxygen saturation immediately and, subsequently, a significant increase in the diameter of the pulmonary artery anulus. They reasonably concluded that ballooning was a useful alternative to a surgical aortopulmonary shunt.

Sommer and Golinko (2), in an editorial in the same issue, concluded that balloon valvuloplasty should *not* be considered an alternative to surgical palliation. The grounds for their dissent were hypothetical and insubstantial.

First, they worried about the chronic effects of cyanosis—specifically, lowered intelligence and polycythemia. The former is of dubious significance considering the confounding factors, and in any case is quite mild. *Marked* polycythemia, of course, is an indication for intervention, whether by surgical palliation or balloon valvuloplasty; however, polycythemia will not be abolished by either procedure since neither abolishes the right to left shunt.

Second, Sommer and Golinko (2) express concern about cyanotic spells, which they attribute to infundibular "spasm." The belief that myocardium can develop tetanus is not new, but is scarcely a credible idea, since tetanus is characteristic of skeletal muscle and *not* myocardium (3). Although the underfilled or hypercontractile right ventricle can increase the relative obstruction of infundibular stenosis, there is strong evidence that spells can also be induced by lowered systemic resistance and hyperventilation (4). The presence, let alone the behavior, of the infundibulum is not even necessary for occurrence of these spells, since they occurred in 75% of patients with pulmonary atresia (5). Of importance, relative to which type of palliation should be tried, is that the frequency and duration of spells were not correlated with the degree of cyanosis at rest in a large series. Since neither surgical nor medical palliation abolishes cyanosis, there is no assurance that either type of palliation will abolish the risk of spells.

The assertion by Sommer and Golinko (2) that spells are so emergent that the need for medical therapy, such as beta-blockade, is evidence of failure of balloon valvuloplasty is surely hyperbole. Do they believe that surgical palliation is immune to complications?

In summary, balloon valvuloplasty for infants and children with tetralogy of Fallot seems worth attempting. If it is unsuccessful, surgical palliation, or even repair may be tried, but Sommer and Golinko (2) have not made a substantive case against valvuloplasty as an initial step.

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5. Morgan BC, Guntheroth WG, Bloom RS, Fyler DC. A clinical profile of paroxysmal hyperpnea in cyanotic congenital heart disease. Circulation 1965;31:66–9.

Reply: I

Guntheroth, in his defense of the article by Sreeram et al. notes the increase in rest oxygen saturation and the subsequent growth of the pulmonary anulus after valvuloplasty. We agree, as stated in our editorial (1), that the enhanced growth of the anulus was an attractive result of the trial. However, a higher rest oxygen saturation does not protect the patient against future hypercyanotic spells. Guntheroth himself underscores this point when he states in his letter that "the frequency and duration of spells were not correlated with the degree of saturation at rest."

We maintain the position stated in our editorial that a hypercyanotic spell is an immediate indication for surgical intervention. This